

APPENDIX A

Corrected Section of Non-compliant Amendment

B. Amendments to the Claims:

Please replace the pending claims with the following:

1. (currently amended) A purified leptin peptide ≤ 15 amino acids long, having a consisting of the amino acid sequence selected from the group consisting of SEQ ID NOS: 2-10 and 18, wherein said peptide is a substantially homogenous preparation, and wherein said leptin peptide modulates body mass.

2. (originally presented) The leptin peptide of claim 1, wherein the leptin peptide does not bind to the leptin receptor.

3. (originally presented) The leptin peptide of claim 1, wherein the leptin peptide can cross the blood brain barrier.

4. (canceled)

5. (withdrawn) The leptin peptide of claim 4, wherein Xaa₁, Xaa₂ and Xaa₃ may be any conservative amino acid substitution.

6 (canceled)

7. (Allowed) A purified peptide which is an OB-3 peptide selected from the group consisting of: amino acid residues ¹¹⁶Ser-Cys-Ser-Leu-Pro-Gln-Thr¹²² of mouse leptin protein (SEQ ID NO:2) and ¹¹⁶Ser-Cys-His-Leu-Pro-Trp-Ala¹²² of human leptin protein (SEQ ID NO:18).

8-11. (canceled)

12. (currently amended) A An isolated leptin peptide consisting ~~essentially~~ of an amino acid sequence selected from the group consisting of:

(i) ~~amino acids 21-35 (SEQ ID NO:3);~~

(ii) ~~amino acids 31-45 (SEQ ID NO:4);~~

(iii) ~~amino acids 41-55 (SEQ ID NO:5);~~

- (iv) ~~amino acids 51-65 (SEQ ID NO:6);~~
- (v) ~~amino acids 61-75 (SEQ ID NO:7);~~
- (vi) ~~amino acids 71-85 (SEQ ID NO:8);~~
- (vii) ~~amino acids 81-95 (SEQ ID NO:9);~~
- (viii) ~~amino acids 91-105 (SEQ ID NO:10);~~
- (ix) ~~amino acids 116-122 (SEQ ID NO:2);~~ and
- (x) ~~amino acids 116-122 (SEQ ID NO:18)~~ wherein said peptide reduces food intake.

13-17. (canceled)

18. (previously amended) A composition comprising the leptin peptide of claim 1, and a pharmaceutically acceptable carrier.

19-42. (canceled)

43. (withdrawn) A purified leptin peptide, and fragment, homologs, analogs and derivatives thereof, wherein the peptide has the following characteristics:

- (a) it is a substantially homogenous preparation; and
- (b) it is comprised of a peptide sequence of at least 90% homology to any one of the sequences set forth in SEQ ID NOS:11, 12, 13, 15 and 16; wherein

the leptin peptide modulates body mass.

44. (withdrawn) The leptin peptide of claim 43, wherein the leptin peptide can cross the blood brain barrier.

45. (canceled)

46. (withdrawn) A pharmaceutical composition comprising any one of the leptin peptides of claim 43, and a pharmaceutically acceptable carrier.

47. (withdrawn) The peptide of claim 43, wherein the peptide contains at least one variant amino acid substitution selected from the group comprising C_α-methylamino acids, N_α-methylamino acids, D-amino acids and α,β-unsaturated amino acids.

48. (canceled)

49. (withdrawn) A kit comprising in one or more containers at least one leptin peptide according to claim 43, a nucleic acid encoding at least one leptin peptide of claim 43, or an antibody that recognizes at least one leptin peptide of claim 43.

50. (withdrawn) A purified leptin peptide, and fragments, homologs, analogs and derivatives thereof, wherein the peptide has the following characteristics:

- (a) it is a substantially homogenous preparation; and
- (b) it is comprised of a peptide sequence of at least 95% homology to the sequence set forth in SEQ ID NO:14; wherein

the leptin peptide modulates body mass.

51. (withdrawn) The leptin peptide of claim 50, wherein the leptin peptide can cross the blood brain barrier.

52. (withdrawn) The peptide of claim 50, wherein the peptide is a human peptide.

53. (withdrawn) A pharmaceutical composition comprising the leptin peptides of claim 50, and a pharmaceutically acceptable carrier.

54. (withdrawn) The peptide of claim 50, wherein the peptide contains at least one variant amino acid substitution selected from the group comprising C_α-methylamino acids, N_α-methylamino acids, D-amino acids and α,β-unsaturated amino acids.

55. (withdrawn) The peptide of claim 50, wherein the peptide is cyclized.

56. (canceled)

57. (withdrawn) A kit comprising in one or more containers a leptin peptide according to claim 50, a nucleic acid encoding a leptin peptide of claim 50, or an antibody that recognizes a leptin peptide of claim 50.

58. (withdrawn) A purified peptide comprising amino acid residues 106 through 120 of the human leptin protein of SEQ ID NO:17.

59. (withdrawn) A purified peptide comprising amino acid residues 126 through 140 of the human leptin protein of SEQ ID NO:17.

60. (withdrawn) A purified peptide comprising the amino acid residues of SEQ ID NO:2.

61. (currently amended) A purified leptin peptide consisting ~~essentially~~ of the amino acid ~~residue~~ sequence selected from the group consisting of SEQ ID NOS: 2, 8, 10 and 18.